

L9 ANSWER 3 OF 3 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AB Mucosal administration of experimental **autoimmune** encephalomyelitis (EAE)-specific autoantigens can reduce the onset of disease. To examine whether cholera toxin-B-subunit (CTB)-conjugated EAE-specific T-cell epitope can reduce development of the **autoimmune** disease in mice, we produced a recombinant hybrid molecule of CTB fusion protein linked with proteolipid-protein (PLP)-peptide 139-151(C140S) at levels up to 0.1 gram per liter culture media in *Bacillus brevis* as a secretion-expression system. Amino acid sequencing and GM1-receptor binding assay showed that this expression system produced a uniformed recombinant hybrid protein. EAE was induced in SJL/J mice by systemic administration with the PLP-peptide. When nasally immunized 5 times with 70 mug rCTB PLP-peptide hybrid protein, mice showed a significantly suppressed development of on-going EAE and an inhibition of both the PLP-peptide-specific delayed-type hypersensitivity (DTH) responses and leukocyte infiltration into the spinal cord. In contrast, all mice given the PLP-peptide alone or the PLP-peptide with the free form of CTB did not suppress the development of EAE and DTH responses. These results suggest that nasal treatment with the recombinant *B. brevis*-derived hybrid protein of CTB and autoantigen peptide could prove useful in the control of multiple sclerosis.

AN 2001:339839 BIOSIS  
DN PREV200100339839  
TI Production of a recombinant hybrid molecule of cholera toxin-B-subunit and proteolipid-protein-peptide for the treatment of experimental encephalomyelitis.  
AU Yuki, Yoshikazu (1); Byun, Youngjin; Fujita, Mitsugu; Izutani, Wakako; Suzuki, Toru; Ueda, Shigezo; Fujihashi, Kohtaro; McGhee, Jerry R.; Kiyono, Hiroshi  
CS (1) JCR Pharmaceuticals Co., 2-2-10 Murotani, Nishi-Ku, Kobe, 651-2241: yukiez@jcrpharm.co.jp Japan  
SO Biotechnology and Bioengineering, (July 5, 2001) Vol. 74, No. 1, pp. 62-69. print.  
ISSN: 0006-3592.  
DT Article  
LA English  
SL English

=> d his

(FILE 'HOME' ENTERED AT 19:28:58 ON 20 JAN 2003)

FILE 'BIOSIS, CAB, CAPLUS, EMBASE, LIFESCI, MEDLINE, SCISEARCH, USPATFULL, JAPIO' ENTERED AT 19:29:08 ON 20 JAN 2003

L1 57 S WILLIAMS, NEIL/AU  
L2 53 DUP REM L1 (4 DUPLICATES REMOVED)  
L3 0 S L2 AND AUTOIMMUNE DISEASE  
L4 0 S HIRST, TIMOTHY/AU  
L5 71 S YUKI, YOSHIKAZU/AU  
L6 274 S UDAKA, SHIGEZO/AU  
L7 53 DUP REM L5 (18 DUPLICATES REMOVED)  
L8 232 DUP REM L6 (42 DUPLICATES REMOVED)  
L9 3 S L7 AND AUTOIMMUNE

=> s 16 and autoimmune

L10 2 L6 AND AUTOIMMUNE

=> d ab bib

L10 ANSWER 1 OF 2 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

AB Mucosal administration of experimental **autoimmune** encephalomyelitis (EAE)-specific autoantigens can reduce the onset of disease. To examine whether cholera toxin-B-subunit (CTB)-conjugated

L9 ANSWER 1 OF 3 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AB Cholera toxin (CT), a major enterotoxin produced by *Vibrio cholerae*, elicits mucosal adjuvant activities by inducing antigen-specific CD4+ T cells secreting T helper type 2 (Th2) cytokines. Experimental **autoimmune encephalomyelitis** (EAE) is induced by Th1 cells specific for myelin-derived antigens. We induced EAE in C57BL/6 mice with myelin oligodendrocyte glycoprotein (MOG) 35-55 and CT was nasally administered as an immunomodulator on day 7 following MOG challenge. Clinical severity in the CT-treated mice was milder when compared to PBS-treated mice, while the levels of expression of interleukin (IL)-12 and interferon (IFN)-gamma in the central nervous system (CNS) of CT-treated mice were lower than PBS-treated mice. Thus, nasal administration of the mucosal immunomodulator CT ameliorated the severity of EAE, which was associated with the suppression of Th1 cell responses.

AN 2001:522254 BIOSIS

DN PREV200100522254

TI Nasal administration of cholera toxin (CT) suppresses clinical signs of experimental **autoimmune encephalomyelitis** (EAE).

AU Yura, Mamoru; Takahashi, Ichiro; Terawaki, Seigo; Hiroi, Takachika; Kweon, Mi-Na; **Yuki, Yoshikazu**; Kiyono, Hiroshi (1)

CS (1) Department of Mucosal Immunology, Research Institute for Microbial Diseases, Osaka University, 3-1 Yamadaoka, Suita, Osaka, 565 0871: kiyono@biken.osaka-u.ac.jp Japan

SO Vaccine, (12 October, 2001) Vol. 20, No. 1-2, pp. 134-139. print.  
ISSN: 0264-410X.

DT Article

LA English

SL English

L9 ANSWER 2 OF 3 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

AB Experimental **autoimmune encephalomyelitis** (EAE) is an animal model for multiple sclerosis in humans. EAE can be passively transferred into naive syngeneic animals by administration of MOG-specific T cell clones. Lymphocytes isolated from green fluorescent protein (GFP)-transgenic (Tg) mice can light up by emitting green fluorescence, thus making it feasible to use such animals in a passive transfer model for EAE. When MOG-sensitized splenic lymphocytes from GFP-Tg mice were adoptively transferred to irradiated, syngeneic C57BL/6 and RAG-1/- mice, typical symptoms of EAE developed. Analysis of the reconstituted mice with EAE revealed prominent infiltration of fluorescing (GFP+), CD4+ T cells into the central nervous system (CNS). Real-time confocal imaging revealed these cells in the spinal cords and brains of recipient mice. This infiltration was also confirmed by anti-GFP monoclonal antibodies. Furthermore, quantitative reverse transcriptase-polymerase chain reaction (RT-PCR) evaluation indicated that the infiltrating GFP+ CD4+ T cells exclusively produced T helper type 1 (Th1) cytokines, especially interferon-gamma (IFN-gamma). These results clearly show that MOG-specific CD4+ T cells preferentially invade into the CNS and mediate the development of EAE by producing Th1-biased cytokines.

AN 2001:429091 BIOSIS

DN PREV200100429091

TI Role of MOG-stimulated Th1 type 'light up' (GFP+) CD4+ T cells for the development of experimental **autoimmune encephalomyelitis** (EAE).

AU Yura, Mamoru; Takahashi, Ichiro; Serada, Masashi; Koshio, Takehiro; Nakagami, Keiji; **Yuki, Yoshikazu**; Kiyono, Hiroshi (1)

CS (1) Department of Mucosal Immunology, Research Institute for Microbial Diseases, Osaka University, 3-1 Yamadaoka, Suita, Osaka, 565-0871: kiyono@biken.osaka-u.ac.jp Japan

SO Journal of Autoimmunity, (Aug., 2001) Vol. 17, No. 1, pp. 17-25. print.  
ISSN: 0896-8411.

DT Article

LA English

SL English

EAE-specific T-cell epitope can reduce development of the **autoimmune** disease in mice, we produced a recombinant hybrid molecule of CTB fusion protein linked with proteolipid-protein (PLP)-peptide 139-151(C140S) at levels up to 0.1 gram per liter culture media in *Bacillus brevis* as a secretion-expression system. Amino acid sequencing and GM1-receptor binding assay showed that this expression system produced a uniformed recombinant hybrid protein. EAE was induced in SJL/J mice by systemic administration with the PLP-peptide. When nasally immunized 5 times with 70 mug rCTB PLP-peptide hybrid protein, mice showed a significantly suppressed development of on-going EAE and an inhibition of both the PLP-peptide-specific delayed-type hypersensitivity (DTH) responses and leukocyte infiltration into the spinal cord. In contrast, all mice given the PLP-peptide alone or the PLP-peptide with the free form of CTB did not suppress the development of EAE and DTH responses. These results suggest that nasal treatment with the recombinant *B. brevis*-derived hybrid protein of CTB and autoantigen peptide could prove useful in the control of multiple sclerosis.

AN 2001:339839 BIOSIS  
DN PREV200100339839  
TI Production of a recombinant hybrid molecule of cholera toxin-B-subunit and proteolipid-protein-peptide for the treatment of experimental encephalomyelitis.  
AU Yuki, Yoshikazu (1); Byun, Youngjin; Fujita, Mitsugu; Izutani, Wakako; Suzuki, Toru; **Udaka, Shigezo**; Fujihashi, Kohtaro; McGhee, Jerry R.; Kiyono, Hiroshi  
CS (1) JCR Pharmaceuticals Co., 2-2-10 Murotani, Nishi-Ku, Kobe, 651-2241: yukiez@jcrpharm.co.jp Japan  
SO Biotechnology and Bioengineering, (July 5, 2001) Vol. 74, No. 1, pp. 62-69. print.  
ISSN: 0006-3592.  
DT Article  
LA English  
SL English

=> d ab bib 1-2

L10 ANSWER 1 OF 2 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AB Mucosal administration of experimental **autoimmune** encephalomyelitis (EAE)-specific autoantigens can reduce the onset of disease. To examine whether cholera toxin-B-subunit (CTB)-conjugated EAE-specific T-cell epitope can reduce development of the **autoimmune** disease in mice, we produced a recombinant hybrid molecule of CTB fusion protein linked with proteolipid-protein (PLP)-peptide 139-151(C140S) at levels up to 0.1 gram per liter culture media in *Bacillus brevis* as a secretion-expression system. Amino acid sequencing and GM1-receptor binding assay showed that this expression system produced a uniformed recombinant hybrid protein. EAE was induced in SJL/J mice by systemic administration with the PLP-peptide. When nasally immunized 5 times with 70 mug rCTB PLP-peptide hybrid protein, mice showed a significantly suppressed development of on-going EAE and an inhibition of both the PLP-peptide-specific delayed-type hypersensitivity (DTH) responses and leukocyte infiltration into the spinal cord. In contrast, all mice given the PLP-peptide alone or the PLP-peptide with the free form of CTB did not suppress the development of EAE and DTH responses. These results suggest that nasal treatment with the recombinant *B. brevis*-derived hybrid protein of CTB and autoantigen peptide could prove useful in the control of multiple sclerosis.

AN 2001:339839 BIOSIS  
DN PREV200100339839  
TI Production of a recombinant hybrid molecule of cholera toxin-B-subunit and proteolipid-protein-peptide for the treatment of experimental encephalomyelitis.  
AU Yuki, Yoshikazu (1); Byun, Youngjin; Fujita, Mitsugu; Izutani, Wakako;

Suzuki, Toru; **Udaka, Shigezo**; Fujihashi, Kohtaro; McGhee, Jerry R.; Kiyono, Hiroshi  
CS (1) JCR Pharmaceuticals Co., 2-2-10 Murotani, Nishi-Ku, Kobe, 651-2241:  
yukiez@jcrpharm.co.jp Japan  
SO Biotechnology and Bioengineering, (July 5, 2001) Vol. 74, No. 1, pp.  
62-69. print.  
ISSN: 0006-3592.  
DT Article  
LA English  
SL English

L10 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS  
AB Mucosal administration of exptl. **autoimmune** encephalomyelitis (EAE)-specific autoantigens can reduce the onset of disease. To examine whether cholera toxin-B-subunit (CTB)-conjugated EAE-specific T-cell epitope can reduce development of the **autoimmune** disease in mice, we produced a recombinant hybrid mol. of CTB fusion protein linked with proteolipid-protein (PLP)-peptide 139-151(C140S) at levels up to 0.1 g per L culture media in *Bacillus brevis* as a secretion-expression system. Amino acid sequencing and GM1-receptor binding assay showed that this expression system produced a uniformed recombinant hybrid protein. EAE was induced in SJL/J mice by systemic administration with the PLP-peptide. When nasally immunized 5 times with 70 .mu.g rCTB PLP-peptide hybrid protein, mice showed a significantly suppressed development of ongoing EAE and an inhibition of both the PLP-peptide-specific delayed-type hypersensitivity (DTH) responses and leukocyte infiltration into the spinal cord. In contrast, all mice given the PLP-peptide alone or the PLP-peptide with the free form of CTB did not suppress the development of EAE and DTH responses. These results suggest that nasal treatment with the recombinant *B. brevis*-derived hybrid protein of CTB and autoantigen peptide could prove useful in the control of multiple sclerosis.  
AN 2001:445511 CAPLUS  
DN 135:255979  
TI Production of a recombinant hybrid molecule of cholera toxin-B-subunit and proteolipid-protein-peptide for the treatment of experimental encephalomyelitis  
AU Yuki, Yoshikazu; Byun, Youngjin; Fujita, Mitsugu; Izutani, Wakako; Suzuki, Toru; **Udaka, Shigezo**; Fujihashi, Kohtaro; McGhee, Jerry R.; Kiyono, Hiroshi  
CS JCR Pharmaceuticals Co., Kobe, 651-2241, Japan  
SO Biotechnology and Bioengineering (2001), 74(1), 62-69  
CODEN: BIBIAU; ISSN: 0006-3592  
PB John Wiley & Sons, Inc.  
DT Journal  
LA English

RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L2 ANSWER 1 OF 53 USPATFULL  
AB A multi disc brake assembly employing a combination fixed rotor and a plurality of axially moving floating rotors. The fixed rotor is attached to and rotates in combination with a wheel hub. The plurality of floating rotors are slidingly attached to the fixed rotor and a plurality of stationary friction surfaces are interleaved therebetween. The stationary friction surfaces are keyed to the caliper housing allowing for axial movement. The floating rotors are connected to the fixed rotor by pins, or are axially slidably keyed at the inner radial periphery to splines on the fixed rotor.  
AN 2002:219244 USPATFULL  
TI Combination floating and fixed rotor for a multi disc brake  
IN Hayford, Roy Lee, Redford, MI, UNITED STATES  
Dreher, Juergen, Muelheim-Kaerlich, GERMANY, FEDERAL REPUBLIC OF  
Giering, Wilfried, Mendig, GERMANY, FEDERAL REPUBLIC OF  
Brademeyer, David L., Centerville, OH, UNITED STATES  
Williams, Neil, Henllys, UNITED KINGDOM  
Kyrtos, Christos T., Southfield, MI, UNITED STATES  
Anderson, Gerald D., Oxford, MI, UNITED STATES  
PA Meritor Heavy Vehicle Systems, LLC (U.S. corporation)  
PI US 2002117363 A1 20020829  
AI US 2001-793261 A1 20010226 (9)  
DT Utility  
FS APPLICATION  
LREP CARLSON, GASKEY & OLDS, P.C., 400 WEST MAPLE ROAD, SUITE 350,  
BIRMINGHAM, MI, 48009  
CLMN Number of Claims: 17  
ECL Exemplary Claim: 1  
DRWN 2 Drawing Page(s)  
LN.CNT 242

L2 ANSWER 2 OF 53 USPATFULL  
AB A brake adjuster is provided for a vehicle brake such as for heavy duty vehicle. The brake adjuster includes a brake module that produces an electrical signal for adjusting the vehicle brake. The heavy duty vehicle brake typically includes a pair of pistons each having first and second portions that are movable relative to one another. A friction element or brake pad is arranged proximate to the second portion and is movable from a desired position to a worn position as the brake pads wear during operation of the vehicle. In one embodiment of the present invention, the first and second portions are slip fit within a sleeve assembly. At least one adjustment member is arranged between the first and second portions. The adjustment member is constructed from a material which expands in response to an electrical signal, such as a magnetostrictive or a piezoelectric material. The adjustment member moves the second portion relative to the first portion and repositions the brake pads from the worn position to the desired position. In another embodiment, the first and second portions are threaded to one another and movable rotationally relative to one another to adjust the length of the piston. The first portions of the pistons include a plurality of teeth about the outer face. A gear is arranged between the pistons and coupled the teeth of the first portions together. An electric actuator has a driven member that is coupled with at least a portion of one of the pistons teeth to rotate the first and second portions relative to one another to increase the length of the piston and move the brake pad from the worn position to the desired position.  
AN 2002:211584 USPATFULL  
TI Brake adjuster  
IN Giering, Wilfried, Mendig, GERMANY, FEDERAL REPUBLIC OF  
Hayford, Roy Lee, Redford, MI, UNITED STATES  
Williams, Neil, Cwmbran, UNITED KINGDOM  
Dreher, Juergen, Muelheim-Kaerlich, GERMANY, FEDERAL REPUBLIC OF  
Kyrtos, Christos T., Southfield, MI, UNITED STATES  
Anderson, Gerald D., Oxford, MI, UNITED STATES

PA Brademeyer, David L., Centerville, OH, UNITED STATES  
PI Meritor Heavy Vehicle Systems, LLC (non-U.S. corporation)  
US 2002112927 A1 20020822  
US 6481542 B2 20021119  
AI US 2001-788912 A1 20010219 (9)  
DT Utility  
FS APPLICATION  
LREP William S. Gottschalk, Esq., Carlson, Gaskey & Olds, P.C., Suite 350,  
400 W. Maple, Birmingham, MI, 48009  
CLMN Number of Claims: 18  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Page(s)  
LN.CNT 346

L2 ANSWER 3 OF 53 USPATFULL

AB A self-servoing disc brake assembly is provided that includes a driven rotor member having a first inner surface with a plurality of first pockets. The driven rotor member also includes a first friction surface spaced from the first inner surface. A movable rotor member is supported on the driven rotor member and is movable relative to the driven rotor member between non-servoed and servoed positions. The friction surfaces are spaced a first distance in the non-servo position, and the friction surfaces are spaced a second distance which is greater than a first distance in the servo position. The movable rotor member includes a second inner surface with a plurality of second pockets adjacent to the first inner surface and a friction surface spaced from the second inner surface. A plurality of balls are arranged between the first and second pockets with at least one of the first and second pockets being ramped. A friction member, such as a disc brake pad, is arranged adjacent to the first friction surface and is movable between engaged and non-engaged positions. The friction member is spaced from the second friction surface in the non-engaged position and the friction member is in contact with the second friction surface in the engaged position to rotate the movable rotor member to the servoed position and produce a supplemental brake clamping force. As the brake pads are moved into engagement with the driven and movable rotor members, a shear force is created on the second friction surface. The shear force causes the movable rotor member to rotate relative to and away from the driven rotor member. As a result, for a particular brake input force a larger braking torque is achieved.

AN 2002:204147 USPATFULL  
TI Self-servoing disc brake rotor  
IN Williams, Neil, Henlys, UNITED KINGDOM  
Dreher, Juergen, Muelheim-Kaerlich, GERMANY, FEDERAL REPUBLIC OF  
Hayford, Roy Lee, Redford, MI, UNITED STATES  
Kyrtos, Christos T., Southfield, MI, UNITED STATES  
Giering, Wilfried, Mendig, GERMANY, FEDERAL REPUBLIC OF  
Brademeyer, David L., Centerville, OH, UNITED STATES  
Anderson, Gerald D., Oxford, MI, UNITED STATES  
PA Meritor Heavy Vehicle Systems, LLC (non-U.S. corporation)  
PI US 2002108819 A1 20020815  
AI US 2001-780831 A1 20010209 (9)  
DT Utility  
FS APPLICATION  
LREP William S. Gottschalk, Esq., Carlson, Gaskey & Olds, P.C., Suite 350,  
400 W. Maple, Birmingham, MI, 48009  
CLMN Number of Claims: 12  
ECL Exemplary Claim: 1  
DRWN 2 Drawing Page(s)  
LN.CNT 261

L2 ANSWER 4 OF 53 USPATFULL

AB The braking mechanism comprises a toggle lever, a brake pad, and an incline. An incline actuates the braking mechanism by forcing an

extension of the toggle lever. As the toggle lever extends, it pushes the brake pad closer to the surface to be slowed. Multiple toggle levers may be used to distribute the force across the brake pad. This configuration allows a single input from the incline to actuate both toggle levers. By adjusting the width of the incline actuating the toggle lever, the force on the brake pad may be adjusted.

AN 2002:176947 USPATFULL  
TI Brake actuation using a toggle clamp  
IN Hayford, Roy Lee, Redford, MI, UNITED STATES  
    Williams, Neil, Henllys, UNITED KINGDOM  
    Dreher, Juergen, Muelheim-Kaerlich, GERMANY, FEDERAL REPUBLIC OF  
    Kyrtos, Christos T., Southfield, MI, UNITED STATES  
    Giering, Wilfried, Mendig, GERMANY, FEDERAL REPUBLIC OF  
    Anderson, Gerald D., Oxford, MI, UNITED STATES  
    Brademeyer, David, Centerville, OH, UNITED STATES  
PA Meritor Heavy Vehicle Systems, LLC (U.S. corporation)  
PI US 2002092716 A1 20020718  
      US 6502671 B2 20030107  
AI US 2001-764684 A1 20010118 (9)  
DT Utility  
FS APPLICATION  
LREP CARLSON, GASKEY & OLDS, P.C., 400 WEST MAPLE ROAD, SUITE 350,  
BIRMINGHAM, MI, 48009  
CLMN Number of Claims: 18  
ECL Exemplary Claim: 1  
DRWN 2 Drawing Page(s)  
LN.CNT 233

L2 ANSWER 5 OF 53 USPATFULL  
AB A vehicle braking system includes a device for cooling the components of the brake assembly. The air source that is normally used to activate the brake assembly components is coupled with a plurality of flexible conduits that direct air toward one or more of the brake assembly components. A high velocity air nozzle preferably is provided at the end of each conduit. The air from the compressed air source is maintained in a compressed state through the conduits and decompresses as it exits the discharge nozzles. The decompression of the air through the nozzles results in cooling the air and the nearby brake components at which the air is directed.  
AN 2002:56514 USPATFULL  
TI Brake assembly with air cooling system  
IN Hayford, Roy Lee, Redford, MI, United States  
    Williams, Neil, Henllys Cwmbran, UNITED KINGDOM  
    Dreher, Juergen, Muelheim-Kaerlich, GERMANY, FEDERAL REPUBLIC OF  
    Kyrtos, Christos T., Southfield, MI, United States  
    Giering, Wilfried, Mendig, GERMANY, FEDERAL REPUBLIC OF  
    Anderson, Gerald D., Oxford, MI, United States  
    Brademeyer, David, Centerville, OH, United States  
PA Meritor Heavy Vehicle Technology, L.L.C., Troy, MI, United States (U.S. corporation)  
PI US 6357563 B1 20020319  
AI US 2001-821187 20010329 (9)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Schwartz, Christopher P.  
LREP Carlson, Gaskey & Olds  
CLMN Number of Claims: 12  
ECL Exemplary Claim: 1  
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)  
LN.CNT 184

L2 ANSWER 6 OF 53 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AN 2000:287769 BIOSIS  
DN PREV200000287769

TI Disease conditions in geriatric horses.  
AU Williams, Neil (1)  
CS (1) Livestock Disease, Diagnostic Center, University of Kentucky,  
Lexington, KY USA  
SO Equine Practice, (April, 2000) Vol. 22, No. 4, pp. 32. print.  
ISSN: 0162-8941.  
DT Article  
LA English  
SL English

L2 ANSWER 7 OF 53 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AN 1999:316866 BIOSIS  
DN PREV199900316866  
TI Parasitism in horses.  
AU Williams, Neil  
SO Equine Practice, (April, 1999) Vol. 21, No. 4, pp. 5.  
ISSN: 0162-8941.  
DT Article  
LA English

L2 ANSWER 8 OF 53 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AB The relative population sizes of mpl ligand-responsive megakaryocytic cells were investigated, and all megakaryocytes grown in culture were assessed. Three groups were analyzed: 1) immature cells with the ability to form single mature megakaryocytes; 2) cells with the ability to divide once before forming megakaryocytes (doublets); and 3) progenitor cells with the ability to form colonies, i.e., to undergo both cytokinesis and maturation. Immature cells forming single megakaryocytes proved most sensitive to the mpl ligand. Committed megakaryocyte progenitors required approximately 30 times more mpl ligand to achieve maximum growth than did the immature megakaryocyte population. Similar numbers of committed megakaryocyte progenitors responded to interleukin (IL)-3 and to mpl ligand. The amplification potential of these progenitor cells responding to each growth factor was assessed by measuring the number of megakaryocytes per colony. In response to mpl ligand progenitor, cells generated smaller colonies, with most cell divisions completed at a significantly earlier time point compared with progenitor cells responding to IL-3. The growth of more primitive megakaryocyte progenitors was best achieved in combination with other growth factors, notably IL-3; mpl ligand alone was ineffective in this regard. A novel finding was the significant number of megakaryocytes that grew in culture as closely coupled pairs (doublets). Data reported indicate that doublet formation may be a result of detection and stimulation of immature megakaryocytes rather than the diminished mpl ligand responsiveness of a proportion of megakaryocyte progenitors. By combining the number of mpl ligand-responsive cells forming single megakaryocytes with those forming megakaryocyte doublets, it is estimated that the size of the immature megakaryocyte pool greatly exceeds previous calculations. Thus we conclude that the immature megakaryocyte population is significantly larger than previously estimated and that these cells are the most sensitive to mpl ligand. Accordingly, these cells are potentially crucial in bone marrow responsiveness to mpl ligand that results from acute thrombocytopenia, being capable not only of endomitosis and maturation but perhaps of cell division as well.

AN 1998:6385 BIOSIS  
DN PREV199800006385  
TI The relative population sizes of megakaryocytic cells in mouse bone marrow as determined by mpl ligand responsiveness.  
AU Mintern, Justine; Williams, Neil (1); Jackson, Heather  
CS (1) Dep. Physiol., Univ. Melbourne, Parkville, VIC 3052 Australia  
SO Experimental Hematology (Charlottesville), (Nov., 1997) Vol. 25, No. 12,  
pp. 1233-1239.  
ISSN: 0301-472X.  
DT Article

LA English

L2 ANSWER 9 OF 53 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

AN 1997:52351 BIOSIS

DN PREV199799351554

TI Acellular hemoglobin blood substitutes impair nitroprusside-induced relaxation of rat aorta.

AU Poli De Figueiredo, Luiz F.; Williams, Neil; Mathru, Mali; Lee, Misook N.; Nelson, Sharon H.

CS Dep. Anesthesiol., Univ. "Texas Med. Branch, Galveston, TX 77555-0591 USA

SO Anesthesiology (Hagerstown), (1996) Vol. 85, No. 3A, pp. A571.

Meeting Info.: Annual Meeting of the American Society of Anesthesiologists New Orleans, Louisiana, USA October 19-23, 1996

ISSN: 0003-3022.

DT Conference; Abstract

LA English

L2 ANSWER 10 OF 53 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE

1

AB Megakaryocyte potentiator derived from mouse bone marrow has been shown to be immunologically similar to Interleukin-6 (IL-6). In this study the activity has been characterized by biochemical and immunochemical techniques. The activity is described as a O-linked glycosylated molecule with an apparent MW of 15 Kd and pI of the range pH 5.9-6.35. The data show that mouse bone marrow potentiator activity is a variant of IL-6 and with the potential to enhance megakaryocyte growth.

AN 1995:294127 BIOSIS

DN PREV199598308427

TI Immunochemical characterisation of megakaryocyte potentiator activity from mouse bone marrow.

AU Banu, Naheed (1); Williams, Neil

CS (1) Hematology Oncol. Res. Lab., New England Deaconess Hosp., 1 Deaconess Road, Boston, MA 02215 USA

SO Journal of Cellular Physiology, (1995) Vol. 163, No. 3, pp. 486-492.

ISSN: 0021-9541.

DT Article

LA English

L2 ANSWER 11 OF 53 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE

2

AB The effect of transforming growth factor-beta-1 (TGF-beta-1) on three developmental stages of megakaryocytopoiesis was investigated. Using a murine bone marrow agar culture system, titrated doses of TGF-beta-1 were added to cultures assaying primitive high proliferative megakaryocyte progenitors committed megakaryocyte precursors, and nondividing, endoreduplicating megakaryocytes. The growth of high proliferative megakaryocyte colony-forming cells (HPP-CFU-Mk) that require the growth factors interleukins-1, 3 and 6 (IL-1 + IL-3 + IL-6) for colony detection was abrogated by the addition of 1 ng TGF-beta-1/ml. The sensitivity of committed megakaryocyte progenitors (colony-forming unit-megakaryocyte, CFU-MK) to TGF-beta-1 depended on the growth factor combination.

TGF-beta-1 (1 ng/ml) completely inhibited megakaryocyte colony formation from CFU-Mk only in cultures stimulated by low doses of IL-3. TGF-beta-1 (> 10 ng/ml) could only marginally inhibit megakaryocyte colony formation generated in the presence of either high doses of IL-3 or the combination of low dose IL-3 + IL-6. TGF-beta-1 inhibited both IL-3-dependent and IL-6-dependent megakaryocyte growth but tenfold higher doses of TGF-beta-1 were required to inhibit growth generated by the combination of IL-3 + IL-6. The data showed that the capacity of TGF-beta-1 to inhibit distinct differentiation stages of the megakaryocytopoietic lineage depended on the concentration and combination of growth factors involved.

AN 1995:16617 BIOSIS

DN PREV199598030917

TI Differential effects of transforming growth factor-beta-1 on distinct

AU developmental stages of murine megakaryocytopoiesis.  
AU Jackson, Heather (1); Williams, Neil; Westcott, Keith R.; Green,  
AU Ralph  
CS (1) Dep. Physiology, Univ. Melbourne, Parkville, VIC Australia  
SO Journal of Cellular Physiology, (1994) Vol. 161, No. 2, pp. 312-318.  
ISSN: 0021-9541.  
DT Article  
LA English

L2 ANSWER 12 OF 53 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE  
3

AB Intragastric administration of live herpes simplex virus type 1 (HSV-1) was assessed for the induction of humoral immune responses and for protection against ocular and cutaneous challenge with virus. Mice showed no clinical abnormalities following intragastric inoculation with three different strains of virus (Miyama +GC, SC16, and P-2C-6, a thymidine kinase-defective mutant). Replication of virus was not detected in the oesophagus, superior cervical ganglia or coeliac ganglia of such animals and latent infection was not detected in these ganglia at later times after inoculation. Induction of a mucosal immune response was indicated by the presence of antibody (mainly IgG or IgA)-secreting cells in Peyer's patches. Intragastric immunization gave protection to some extent against ocular challenge and to a greater extent against cutaneous challenge with HSV-1. Following the latter challenge, particularly after intragastric immunization with strains SC16 and Miyama, the establishment of latency was almost completely prevented.

AN 1993:410123 BIOSIS  
DN PREV199396075848

TI Protection against ocular and cutaneous infection with herpes simplex virus type 1 by intragastric immunization with live virus.

AU Irie, Hiroshi (1); Shimeld, Carolyn; Williams, Neil; Hill, Terry (1)  
CS (1) Dep. Pathol. Microbiol., Med. Sch., Univ. Bristol, Bristol BS8 1TD UK  
SO Journal of General Virology, (1993) Vol. 74, No. 7, pp. 1357-1362.  
ISSN: 0022-1317.

DT Article  
LA English

L2 ANSWER 13 OF 53 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE  
4

AB Partially purified protein preparations containing megakaryocyte growth factor activity were prepared from human embryonic kidney (HEK) cell conditioned medium using ammonium sulfate precipitation, Cibacron blue affinity chromatography, and wheatgerm lectin affinity chromatography. Treatment of these preparations with neutralizing antibodies directed against erythropoietin (EPO) and interleukin 6 (IL6) resulted in a dramatic reduction in their capacity to stimulate megakaryocyte maturation in vitro. The presence of EPO in these preparations was confirmed by both immunoblotting and use of a mouse spleen erythroid progenitor cell proliferation assay routinely used to quantitate EPO activity in vitro. Northern blot analysis of HEK cell-derived mRNA with IL6 DNA probes revealed the presence of an IL6 transcript with a molecular size of 1.3 kb. Analysis of the HEK cell-derived preparation by ELISA confirmed the presence of immunologically reactive IL6. In addition, it was shown that purified recombinant human EPO and IL6 stimulated megakaryocyte maturation in the in vitro assay used in this study. These data indicate that the activity in HEK cell conditioned medium that stimulates megakaryocyte maturation in vitro is predominantly due to the presence of IL6 and EPO. Immunoneutralization studies of another HEK cell-derived preparation, which was inhibitory in the megakaryocyte maturation assay, demonstrated that it contained transforming growth factor beta (TGF-beta), a potent inhibitor of megakaryocyte maturation. Taken together, these studies indicate that HEK cell conditioned medium, which has previously been reported to contain megakaryocyte growth factor activity, is comprised of

a complex mixture of growth and differentiation factors, some of which promote and others that inhibit the process of megakaryopoiesis.

AN 1993:73032 BIOSIS  
DN PREV199395037532

TI Growth factors produced by human embryonic kidney cells that influence megakaryopoiesis include erythropoietin, interleukin 6, and transforming growth factor-beta.

AU Withy, Raymond M.; Rafield, Lori F.; Beck, Anton K.; Hoppe, Henry; Williams, Neil; McPherson, John M. (1)

CS (1) Molecular Biol. Dep., Genzyme Corporation, Framingham, Mass. 01701

SO Journal of Cellular Physiology, (1992) Vol. 153, No. 2, pp. 362-372.  
ISSN: 0021-9541.

DT Article  
LA English

L2 ANSWER 14 OF 53 CAPLUS COPYRIGHT 2003 ACS

AB The role of recombinant rat stem cell factor (rrSCF) was studied on defined primitive bone marrow cell populations. In agar culture of 500 lineage-neg./Sca-1-pos. (Lin-/Sca-1-) cells, rrSCF alone stimulates small colonies of predominantly granulocytic cells. The recombination of rrSCF plus interleukin-3 (IL-3), granulocyte-macrophage colony-stimulating factor (GM-CSF), or macrophage CSF (CSF-1) stimulated primitive progenitor cells defined as high proliferative potential colony-forming cells (HPP-CFC). Synergistic increases in total colony nos. were obtained with rrSCF plus GM-CSF, granulocyte CSF (G-CSF), CSF-1, or IL-6, but not IL-1 or IL-3. Lin-/Sca-1- cells were incubated in liq. culture at 3000 cells/mL for 6 days in the presence of rrSCF alone or in combination with other growth factors. The total no. of cells increased 2-fold in the presence of rrSCF, with the progeny primarily myeloid in nature. The greatest increase in cell no. was obtained with rrSCF plus IL-3, where the cell no. increased 40-fold. These factors also stimulated an increase in HPP-CFC (10-fold) and GM-CFC (500-fold). To detn. if these interactions were direct, single Lin-/Sca-1+ cells were sorted into microtiter wells and the cell proliferation scored 6 days later. RrSCF synergized with IL-3, IL-6, and G-CSF to stimulate the proliferation of single cells. The cells in pos. wells were subcultured into colony-forming assays and up to 400 CFC per well were obtained after 14 days incubation of the secondary cultures. These data demonstrate that rrSCF acts in combination with various growth factors to stimulate directly the amplification potential of hematopoietic precursors, resulting in differentiation of these precursors.

AN 1992:100081 CAPLUS  
DN 116:100081

TI Recombinant rat stem cell factor stimulates the amplification and differentiation of fractionated mouse stem cell populations

AU Williams, Neil; Bertoncello, Ivan; Kavnoudias, Helen; Zsebo, Kris; McNiece, Ian

CS Dep. Physiol., Univ. Melbourne, Parkville, Australia

SO Blood (1992), 79(1), 58-64  
CODEN: BLOOAW; ISSN: 0006-4971

DT Journal  
LA English

L2 ANSWER 15 OF 53 CAPLUS COPYRIGHT 2003 ACS

AB A subset of stem cell antigen (sca-1)-pos. mouse megakaryocyte progenitors was identified that correlates with other primitive precursors in bone marrow. The responsive bone marrow cells were obtained by depleting the marrow of cells bearing defined lineage markers (neutrophils, macrophages, and lymphoid cells) and enriched for primitive myeloid progenitor cells with high proliferative potential, selecting for cells expressing sca-1. The sca-1-pos. megakaryocyte progenitors formed colonies in the presence of interleukin 3 (IL-3) alone. Immature megakaryocytes depleted of mature megakaryocytes and of cells expressing myeloid and lymphoid lineage markers were also responsive to IL-3. Thus, in the presence of high doses

of IL-3, accessory cells are not obligatory for growth factor stimulation of megakaryocytopoiesis in vitro.

AN 1992:149753 CAPLUS  
DN 116:149753  
TI Interleukin 3 directly stimulates both megakaryocyte progenitor cells and immature megakaryocytes  
AU Kavnoudias, Helen; Jackson, Heather; Ettlinger, Karen; Bertoncello, Ivan; McNiece, Ian; **Williams, Neil**  
CS Dep. Physiol., Univ. Melbourne, Parkville, 3052, Australia  
SO Experimental Hematology (New York, NY, United States) (1992), 20(1), 43-6  
CODEN: EXHMA6; ISSN: 0301-472X  
DT Journal  
LA English

L2 ANSWER 16 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB A review with 60 refs. Recent data concerning the ability of interleukin 6 (IL-6) to stimulate platelet prodn. have raised the possibility that platelet prodn. is not specifically regulated by a unique feedback mechanism, but is part of a network encompassing several hemopoietic growth factors. Hypotheses are presented about the nature of thrombopoietin, its relationship to known growth factors, esp. IL-6, and the specificity of a thrombopoietic response following change in the circulating platelet mass.

AN 1991:677189 CAPLUS  
DN 115:277189  
TI Is thrombopoietin interleukin 6?  
AU **Williams, Neil**  
CS Dep. Physiol., Univ. Melbourne, Parkville, 3052, Australia  
SO Experimental Hematology (New York, NY, United States) (1991), 19(7), 714-18  
CODEN: EXHMA6; ISSN: 0301-472X  
DT Journal; General Review  
LA English

L2 ANSWER 17 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB S1/S1d mice are a unique animal model for studying platelet prodn. in that they sustain normal platelet mass despite reduced marrow activity. The aim of this study was to det. if the compensatory mechanisms operating in these mice could be augmented by further reducing bone marrow activity with the drug 5-fluorouracil (5-FU), known to induce a strong stimulatory effect on platelet prodn. The platelet recovery in S1/S1d mice after 5-FU administration contrasted with that found in their normal littermates. S1/S1d mice did not display the sustained thrombocytosis that was obsd. in +/- mice between days 10 and 14. Platelet no. was elevated in S1/S1d mice at day 20, when the marrow megakaryocyte compartment had normalized. A significant increase in marrow megakaryocyte no. and size was obsd. at days 8 and 11 in both +/- and S1/S1d mice after 5-FU administration. Apparently, the increase in megakaryocyte size and no. following 5-FU treatment was not able to contribute significantly to a sustained rebound thrombocytosis at the time of increased marrow megakaryocytopoiesis. Thus, the already compromised marrow of S1/S1d mice is able to respond to the damage invoked by 5-FU to produce larger than normal megakaryocytes. In contrast to normal mice (+/+ littermates), the increase in marrow megakaryocytopoiesis obsd. does not lead to a thrombocytosis, indicating that platelet prodn. and release in S1/S1d mice cannot be further amplified by a strong marrow stimulation.

AN 1991:119260 CAPLUS  
DN 114:119260  
TI Compensatory mechanisms in platelet production: the response of S1/S1d mice to 5-fluorouracil  
AU Arnold, Julie; Ellis, Sarah; Radley, John M.; **Williams, Neil**  
CS Dep. Physiol., Univ. Melbourne, Parkville, 3052, Australia  
SO Experimental Hematology (New York, NY, United States) (1991), 19(1), 24-8  
CODEN: EXHMA6; ISSN: 0301-472X

DT Journal  
LA English

L2 ANSWER 18 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB Unavailable  
AN 1991:79383 CAPLUS  
DN 114:79383  
TI Progress in Clinical and Biological Research, Vol. 356: Molecular Biology and Differentiation of Megakaryocytes. Proceedings of the Third International Conference on Megakaryocytes: Megakaryocytes: Cellular and Molecular Biology, Held at Conseil Regional de Bourgogne, Dijon, France, July 23-27, 1989  
AU Breton-Gorius, Janine; Levin, Jack; Nurden, Alan T.; Williams, Neil; Editors  
CS USA  
SO (1990) Publisher: (Wiley-Liss, New York, N. Y.), 372 pp.  
DT Book  
LA English

L2 ANSWER 19 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB The immunol. and biochem. characteristics of murine megakaryocyte potentiator from lung and bone marrow were examd. and compared with thrombopoietic stimulatory factor. Biol. activity was not neutralized by anti-erythropoietin, but megakaryocyte potentiator activity from all three sources was abolished or reduced when the preps. were treated with anti-thrombopoietic stimulatory factor or anti-interleukin-6. Megakaryocyte potentiator levels in lung conditioned medium were not enhanced from mice treated with lipopolysaccharide, in contrast to granulocyte-macrophage colony-stimulating factor (GM-CSF) levels. The biochem. properties of murine megakaryocyte potentiator from lung and bone marrow were compared and found to be similar in the elution profiles from anion exchange, gel filtration and reversed phase liq. chromatog. It is concluded that the activities in lung and bone marrow are very similar if not identical, to interleukin-6.

AN 1990:545950 CAPLUS  
DN 113:145950  
TI Tissue sources of murine megakaryocyte potentiator: biochemical and immunological studies  
AU Banu, Naheed; Fawcett, Jenny; Williams, Neil; De Giorgio, Toni; Withy, Raymond  
CS Dep. Physiol., Univ. Melbourne, Parkville, 3052, Australia  
SO British Journal of Haematology (1990), 75(3), 313-18  
CODEN: BJHEAL; ISSN: 0007-1048  
DT Journal  
LA English

L2 ANSWER 20 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB A review with 76 refs. Megakaryocytopoiesis is the formation of new platelets in megakaryocytes in hemopoietic tissue, predominantly the bone marrow. The prodn. of megakaryocytes from precursors, and their development and formation into platelets, involves the commitment of precursors to the cell lineage, cell expansion followed by endomitosis, and cytoplasmic maturation of megakaryocytes before release of platelets into the circulation. The mechanisms controlling these various differentiation events are poorly understood. This paper provides an overview of the interaction of the known stimulatory factors.

AN 1990:95922 CAPLUS  
DN 112:95922  
TI Megakaryocyte growth factors  
AU Williams, Neil  
CS Univ. Melbourne, Parkville, Australia  
SO Immunology Series (1990), 49(Colony-Stimul. Factors), 215-29  
CODEN: IMSED7; ISSN: 0092-6019  
DT Journal; General Review

LA English

L2 ANSWER 21 OF 53 CAPLUS COPYRIGHT 2003 ACS

AB A composite of a silicone and a carbon-based polymer with electron-withdrawing groups 2.4-mm-thick was measured at frequencies 100MHz to 18 GHz for its electromagnetic interference (EMI) and cond. characteristics for use in electromagnetic shielding applications. This thin sample achieved high transmission loss over a broad frequency range.

AN 1991:187073 CAPLUS

DN 114:187073

TI Polymer-based composites for RFI/EMI applications

AU Williams, Neil; Varadan, Vijay K.; Varadan, Vasundara V.

CS Res. Cent. Eng. Electron. Acoust. Mater., Pennsylvania State Univ., State College, PA, 16802, USA

SO Proceedings of SPIE-The International Society for Optical Engineering (1990), 1307(Electro-Opt. Mater. Switches, Coat., Sens. Opt. Detect.), 154-6

CODEN: PSISDG; ISSN: 0277-786X

DT Journal

LA English

L2 ANSWER 22 OF 53 CAPLUS COPYRIGHT 2003 ACS

AB A review with 110 refs. Megakaryocytopoiesis is regulated at both the humoral and organ levels. Growth factors involved are the interleukins, esp. interleukin 6, and maybe erythropoietin. Whether thrombopoietin is interleukin 6 is discussed.

AN 1991:141018 CAPLUS

DN 114:141018

TI Stimulators of megakaryocyte development and platelet production

AU Williams, Neil

CS Dep. Physiol., Univ. Melbourne, Parkville, 3052, Australia

SO Progress in Growth Factor Research (1990), 2(2), 81-95

CODEN: PGFREH; ISSN: 0955-2235

DT Journal; General Review

LA English

L2 ANSWER 23 OF 53 CAPLUS COPYRIGHT 2003 ACS

AB The roles of factors from mouse lung in stimulating murine megakaryocytopoiesis were exmd. Conditioned medium from normal mice was found to contain interleukin 3 (IL-3) activity in addn. to granulocyte-macrophage colony-stimulating factor (GM-CSF) and megakaryocyte potentiator (Mk-potentiator). The Mk-potentiator activity of mouse lung-conditioned medium (MLCM) was immunol. distinct from IL-3. Biochem. sepn. of MLCM showed Mk-potentiator activity with an activity profile distinct from IL-3 and GM-CSF. When titrated, Mk-potentiator was the major activity enhancing megakaryocyte colony formation in MLCM. By contrast, at high concns. of MLCM, all factors were present and may play a role in megakaryocyte colony growth and development.

AN 1989:73660 CAPLUS

DN 110:73660

TI The roles of factors from lung in murine megakaryocytopoiesis

AU Fawcett, Jenny; Huat, Oon Swee; Williams, Neil

CS Dep. Physiol., Univ. Melbourne, Parkville, Australia

SO Experimental Hematology (New York, NY, United States) (1989), 17(1), 25-9

CODEN: EXHMA6; ISSN: 0301-472X

DT Journal

LA English

L2 ANSWER 24 OF 53 CAPLUS COPYRIGHT 2003 ACS

AB Auranofin (AF) and its deacetylated form inhibited the development of macrophage and granulocytic colonies from progenitor cells in human bone marrow even at concns. .ltoreq.10-9M. The rheumatoid arthritis-suppressive activity of AF could result in part from the redn. of cell nos. in arthritic lesions. In contrast, other slow-acting antirheumatic

drugs (sulfasalazine, chloroquine, and hydroxychloroquine) caused partial inhibition of colony development, but at concns. of the order of 10-5M.

AN 1987:470440 CAPLUS  
DN 107:70440  
TI Effects of auranofin and other antirheumatic drugs on human myelopoiesis in vitro  
AU Hamilton, John A.; **Williams, Neil**  
CS Dep. Med., Univ. Melbourne, Parkville, 3050, Australia  
SO Journal of Rheumatology (1987), 14(2), 216-20  
CODEN: JRHUA9; ISSN: 0315-162X  
DT Journal  
LA English

L2 ANSWER 25 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB The biol. and immunol. properties of stimulators of in vitro murine megakaryocytopoiesis were studied by using a heterologous anti-interleukin 3 (IL-3) serum. All megakaryocyte colony development was inhibited with the antiserum using 3 sources of IL-3, including WEHI-3 cell conditioned medium (WEHI-3CM), pokeweed mitogen-spleen conditioned medium (PWM-SCM) and recombinant IL-3. The data indicate that IL-3 is an abs. requirement for murine megakaryocyte colony development in this system. The antiserum abolished all myeloid colony growth stimulated by WEHI-3CM, but not PWM-SCM. The in vitro development of single megakaryocytes stimulated by a second putative growth factor, megakaryocyte-potentiator, was not inhibited by the antibody. The antiserum pptd. a 26 kilodalton mol. wt. protein from a radioiodinated sample of IL-3. No cross-reactivity by the antiserum with other colony-stimulating factors (CSF) including CSF-1 and granulocyte-macrophage CSF was obsd. The data indicate that IL-3 and megakaryocyte-potentiator are immunol. unrelated and provides further support that the 2 factors are sep. mols.

AN 1987:136711 CAPLUS  
DN 106:136711  
TI Hemopoietic growth factors stimulating murine megakaryocytopoiesis: interleukin-3 is immunologically distinct from megakaryocyte-potentiator  
AU Sparrow, Rosemary L.; Swee-Huat, Oon; **Williams, Neil**  
CS Dep. Physiol., Univ. Melbourne, Parkville, 3052, Australia  
SO Leukemia Research (1987), 11(1), 31-6  
CODEN: LEREDD; ISSN: 0145-2126  
DT Journal  
LA English

L2 ANSWER 26 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB Unavailable  
AN 1986:422359 CAPLUS  
DN 105:22359  
TI Progress in Clinical and Biological Research, Vol. 215: Megakaryocyte Development and Function. [Proceedings of an International Conference Held at Woods Hole, Mass., September 18-21, 1985]  
AU Levine, Richard F.; **Williams, Neil**; Levin, Jack; Evatt, Bruce L.; Editors  
CS USA  
SO (1986) Publisher: (Alan R. Liss, Inc., New York, N.Y.), 435 pp.  
DT Book  
LA English

L2 ANSWER 27 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB The biochem. properties of an in vitro megakaryocyte growth factor called megakaryocyte potentiator (Mk-POT) were investigated. P388D1 cell conditioned medium (P388D1 CM) was used as the source of Mk-POT. The potentiator activity had an apparent mol. wt. of 21 kilodaltons by gel filtration and was eluted from DEA-Sepharose pH 8.0 with 0.15M NaCl. Chromatofocusing revealed 3 active species with apparent pIs of 4.0, 5.5, and >6.0. Most Mk-POT activity did not bind to Con A-Sepharose. Mk-POT activity is sensitive to redn. by dithiothreitol and temps. >90.degree..

Treatment with trypsin, .alpha.-chymotrypsin, and Pronase also reduced the Mk-POT activity, but it was not destroyed by RNase A or neuraminidase. It was pptd. in (NH4)2SO4 solns. of 60-70% satn., and by 80% EtOH. The Mk-POT activity was stable in solns. of pH 5.0-9.0. Mk-POT may be either heterogeneous in its properties or >1 mol. species may express the in vitro Mk-POT activity found in P388D1 CM.

AN 1986:400797 CAPLUS

DN 105:797

TI Biochemical characterization of an in-vitro murine megakaryocyte growth activity: megakaryocyte potentiator

AU Huat, Oon Swee; **Williams, Neil**

CS Dep. Physiol., Univ. Melbourne, Parkville, 3052, Australia

SO Leukemia Research (1986), 10(4), 403-11

CODEN: LEREDD; ISSN: 0145-2126

DT Journal

LA English

L2 ANSWER 28 OF 53 CAPLUS COPYRIGHT 2003 ACS

AB Rabbit anti-megakaryocyte colony-stimulating factor [62683-29-8] inhibited the in vitro megakaryocyte colony-stimulating activity of both megakaryocyte colony-stimulating factor isolated from the culture media for WEHI-3CM cells by phenyl-Sepharose sepn., anion-exchange chromatog., gel filtration, and reversed-phase chromatog. and recombinant interleukin-3. Megakaryocyte potentiator acted synergistically with either interleukin-3 or megakaryocyte colony-stimulating factor to produce increased nos. of recognizable megakaryocytes. Megakaryocyte colony-stimulating factor and interleukin-3 may be identical mols.

AN 1986:509404 CAPLUS

DN 105:109404

TI Megakaryocyte colony stimulating factor: its identity to interleukin-3

AU Sparrow, Rosemary L.; **Williams, Neil**

CS Dep. Physiol., Univ. Melbourne, Parkville, 3052, Australia

SO Progress in Clinical and Biological Research (1986), 215(Megakaryocyte Dev. Funct.), 123-8

CODEN: PCBRD2; ISSN: 0361-7742

DT Journal

LA English

L2 ANSWER 29 OF 53 CAPLUS COPYRIGHT 2003 ACS

AB The Au salts gold thiomalate [12244-57-4], gold chloride, and gold thioglucose [12192-57-3] and D-penicillamine [52-67-5] suppressed the in vitro development of colonies of myeloid cells (macrophages, granulocytes and megakaryocytes) from progenitor cells in murine bone marrow; these drugs were also effective in inhibiting the development of macrophage and granulocytic colonies in human bone marrow. The drug generally required concns. of 10-5 M in the murine system, whereas they were active at 10-7-10-8 for human progenitor cells. The disease-suppressive activity of Au salts and D-penicillamine could result, in part, from the redn. of cell nos. in arthritic lesions; these findings would provide a mechanism for this possibility.

AN 1986:81710 CAPLUS

DN 104:81710

TI In vitro inhibition of myelopoiesis by gold salts and D-penicillamine

AU Hamilton, John A.; **Williams, Neil**

CS Dep. Med., Univ. Melbourne, Parkville, 3050, Australia

SO Journal of Rheumatology (1985), 12(5), 892-6

CODEN: JRHUA9; ISSN: 0315-162X

DT Journal

LA English

L2 ANSWER 30 OF 53 CAPLUS COPYRIGHT 2003 ACS

AB Various growth factors including purified erythropoietin [11096-26-7], colony-stimulating factor-1 (CSF-1) [81627-83-0], and granulocyte-macrophage colony-stimulating factor (CSF) [83869-56-1] were

tested for their ability to stimulate megakaryocytopoiesis. Four sep. preps. of erythropoietin were tested in highly defined cell culture medium. One unit of purified material stimulated small but significant nos. of megakaryocyte colonies, both in serum-contg. and in serum-free cultures. All other erythropoietin preps. failed to induce megakaryocyte colony formation. Purified erythropoietin showed no synergistic activity with either WEHI-3 cell conditioned medium (WEHI-3CM, a source of both megakaryocyte CSF and megakaryocyte-potentiating activity) or P388D1 cell conditioned medium (P388D1CM, a prep. contg. megakaryocyte potentiator). Partially purified thrombopoietic stimulatory factor [9014-42-0] did not stimulate directly megakaryocyte colony formation, but acted together with WEHI-3CM, augmenting the no. of clonable progenitors detected. Optimal activity was obsd. at 12-25 .mu.g protein per plate. Myeloid growth factors (CSF-1 and GM-CSF) were inactive in the murine megakaryocyte assay. The data show lineage specificity for the myeloid stimulators, but a purified erythropoietin prep. does stimulate a small level of megakaryocytopoiesis.

AN 1985:1081 CAPLUS  
DN 102:1081  
TI The role of erythropoietin, thrombopoietic stimulating factor, and myeloid colony-stimulating factors on murine megakaryocyte colony formation  
AU Williams, Neil; Jackson, Heather; Iscove, Norman N.; Dukes, Peter P.  
CS Dep. Physiol., Univ. Melbourne, Parkville, 3052, Australia  
SO Experimental Hematology (New York, NY, United States) (1984), 12(9), 734-40  
CODEN: EXHMA6; ISSN: 0301-472X  
DT Journal  
LA English

L2 ANSWER 31 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB Conditioned medium (contg. lymphokines) from antigen- or mitogen-stimulated murine spleen cells contained factors (colony stimulating factors, CSF) that induced formation of granulocyte and macrophage colonies in cultures of bone marrow cells. Lymphokines also contained factors that induced macrophage nonspecific tumoricidal activity against fibrosarcoma 1023, antibody-dependent tumoricidal activity against lymphoma 18-8, and antimicrobial activities against amastigotes of the protozoan parasite, Leishmania tropica. The factors that regulated macrophage effector functions, however, were different from those that induced colony formation, and could be distinguished from CSF by Sephadex gel chromatog. or heat sensitivity. To further analyze a role for CSF in induction of macrophage effector activities, conditioned medium from several nonlymphoid cell sources (L-929, WEHI-3, and endotoxin-treated lung cells) were assayed for CSF activities and capacity to induce tumoricidal and microbicidal activities. Conditioned medium that contained either macrophage CSF or the factor that induced formation of both macrophage and granulocyte colonies failed to activate macrophages for effector activities against fibrosarcoma 1023, lymphoma 18-8, and L. tropica amastigotes (either resistance to infection or intracellular destruction). Apparently, CSF has no direct role in activation of macrophages for tumoricidal and microbicidal activities against these targets.

AN 1983:158918 CAPLUS  
DN 98:158918  
TI Colony-stimulating factors and regulation of macrophage tumoricidal and microbicidal activities  
AU Ralph, Peter; Nacy, Carol A.; Meltzer, Monte S.; Williams, Neil; Nakoinz, Ilona; Leonard, Edward J.  
CS Sloan-Kettering Inst. Cancer Res., Rye, NY, 10580, USA  
SO Cellular Immunology (1983), 76(1), 10-21  
CODEN: CLIMB8; ISSN: 0008-8749  
DT Journal  
LA English

L2 ANSWER 32 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB Heterogeneity among immature megakaryocytes was examined by phys. properties, cell cycle status, and responsiveness to thrombopoietic stimulatory factor. Three types of immature megakaryocytes exist that can be recognized by acetylcholinesterase staining, nuclear shape, high nucleus/cytoplasm ratio, and small size (8-18  $\mu$ m.) with respect to mature megakaryocytes ( $>18 \mu$ m.). These 3 acetylcholinesterase-contg. cell types are distinguished by their nuclear configuration: a round, indented, and lobed nucleus. The lobed cell type was found to overlap with and enhance detection of megakaryoblasts (stage I megakaryocytes). These cells had a sedimentation velocity range of 3.5-19.0 mm/h and a d. range of 1.072-1.095 g/cm<sup>3</sup>. Sepn. of these 3 classes of immature megakaryocytes was achieved by equil. d. centrifugation with modal buoyant densities of 1.079 g/cm<sup>3</sup> (round), 1.084 g/cm<sup>3</sup> (indented), and 1.089 g/cm<sup>3</sup> (lobed). In the presence of thrombopoietic stimulatory factor, the round nucleated cells, but not the indented or lobed nuclei morphol., were obsd. to develop into large mature megakaryocytes in 60-h semisolid cell cultures. Development of 2 cell groups, or colonies of megakaryocytes, was not obsd. during this in vitro incubation period. In vivo treatment with hydroxyurea indicated that 57.5% of the round nucleus form were actively synthesizing DNA. No redn. in the nos. of indented or lobed nucleus forms were obsd. following hydroxyurea treatment. These 3 types of immature megakaryocytes probably reflect the early maturation stages occurring in megakaryocyte differentiation.

AN 1982:160028 CAPLUS  
DN 96:160028  
TI Immature megakaryocytes in the mouse: physical characteristics, cell cycle status, and in vitro responsiveness to thrombopoietic stimulatory factor  
AU Long, Michael W.; Williams, Neil; Ebbe, Shirley  
CS Dep. Hematopoietic Dev., Sloan-Kettering Inst. Cancer Res., Rye, NY, USA  
SO Blood (1982), 59(3), 569-75  
CODEN: BLOOAW; ISSN: 0006-4971  
DT Journal  
LA English

L2 ANSWER 33 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB The main Cortlandt complex was divided into 6 sep. plutons each with its own internal structure and limited in situ differentiation. These igneous rocks intrude across a regional Taconic metamorphic zonation from sillimanite-kyanite in the east to chlorite grade in the west. K-Ar dates for mineral seps. from the post-metamorphic Cortlandt complex and related dikes range 396-557 Myr. Excluding dates from dikes with excess Ar, the biotite date max. is 442 Myr, and the hornblende max. is 496 Myr. Rb-Sr dates for biotite indicate a min. age of 423 Myr. A Rb-Sr whole-rock isochron date of .apprx.411 Myr (initial  $^{87}\text{Sr}/^{86}\text{Sr}$  .simeq. 0.7064) was obtained for 5 samples of norite from the central basin. Small Rb enrichments and heterogeneous initial  $^{87}\text{Sr}/^{86}\text{Sr}$  ratios give rise to the large uncertainty in age. Biotite from 3 rhyodacite dikes belonging to the Rosetown dike swarm yielded K-Ar dates of 393-423 Myr. Five samples from a granodiorite body, produced a Rb-Sr isochron date of .apprx.422 Myr (initial  $^{87}\text{Sr}/^{86}\text{Sr}$  .simeq..7046). The other Rosetown complex samples plot on, or close to, the 422 Myr isochron, but these samples are too low in Rb to provide accurate dates for the more mafic phases.

AN 1982:512928 CAPLUS  
DN 97:112928  
TI Emplacement history and tectonic significance of the Cortlandt complex, related plutons, and dike swarms in the Taconide zone of southeastern New York [USA] based on potassium-argon and rubidium-strontium investigations  
AU Ratcliffe, Nicholas M.; Armstrong, Richard Lee; Mose, Douglas G.; Seneschal, Ronald; Williams, Neil; Baiamonte, Matthew J.  
CS Dep. Earth Planetary Sci., City Univ. New York, New York, NY, 10031, USA  
SO American Journal of Science (1982), 282(3), 358-90

CODEN: AJSCAP; ISSN: 0002-9599

DT Journal  
LA English

L2 ANSWER 34 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB NPT 15392 (I) [76600-30-1], an immunomodulating compd., enhances T-cell-dependent immune responses. Antibody responses to sheep red blood cells are augmented 2-3-fold in mice receiving NPT 15392, whereas T-cell-independent antibody responses to TNP-LPS are unaffected. NPT 15392 does not enhance or alter the no. of clonable B-cells. This drug also increases cytotoxic T-lymphocyte responses to allogeneic tumor cells but does not alter the no. of cytotoxic precursor cells. Immature hematopoietic cell classes (clonable progenitor cells) were also not influenced by NPT 15392.

AN 1982:556127 CAPLUS

DN 97:156127

TI Immunoenhancing activity of NPT 15392: a potential immune response modifier

AU Merluzzi, Vincent J.; Walker, Margaret M.; **Williams, Neil**; Susskind, Brian; Hadden, John W.; Faanes, Ronald B.

CS Walker Lab., Sloan-Kettering Inst. Cancer Res., Rye, NY, 10580, USA

SO International Journal of Immunopharmacology (1982), 4(3), 219-24  
CODEN: IJIMDS; ISSN: 0192-0561

DT Journal

LA English

L2 ANSWER 35 OF 53 CAPLUS COPYRIGHT 2003 ACS

AB A polemic in reply to J. W. Smith (*ibid.*, 2257-9). The most likely explanation for the colinearity of the C and O isotope data is that the carbonates in the concordant deposits equilibrated with the same (or similar) mineralizing solns. as those which formed the discordant deposits.

AN 1982:165841 CAPLUS

DN 96:165841

TI Studies of the base metal sulfide deposits at McArthur River, Northern Territory, Australia: III. The stable isotope geochemistry of the H.Y.C., Ridge, and Cooley deposits. Reply to comments

AU Rye, Danny M.; **Williams, Neil**

CS Dep. Geol. Geophys., Yale Univ., New Haven, CT, 06520, USA

SO Economic Geology and the Bulletin of the Society of Economic Geologists (1981), 76(8), 2259-60  
CODEN: ECGLAL; ISSN: 0361-0128

DT Journal

LA English

L2 ANSWER 36 OF 53 CAPLUS COPYRIGHT 2003 ACS

AB The formation of the stratiform base-metal sulfide ores of the Cooley, Ridge, and H.Y.C. deposits (in shales) of Northern Territory, Australia, was studied by S, C, and O isotope geochem. The galena-sphalerite isotopic fractions indicate higher equil. isotopic temps. for the Cooley deposits (275-90.degree.) than for the Ridge and H.Y.C. deposits (100-260.degree.); these results correlated with a systematic temp. decrease away from the Emu fault. The data support the hypothesis that the discordant and cordant deposits of the area are related and both deposit-types formed from a common mineralizing fluid flowing from the Emu fault zone. The mineralizing processes were probably operating, at least in part, below the sediment-water interface.

AN 1981:160088 CAPLUS

DN 94:160088

TI Studies of the base metal sulfide deposits at McArthur River, Northern Territory, Australia: III. The stable isotope geochemistry of the H.Y.C., Ridge and Cooley deposits

AU Rye, Danny M.; **Williams, Neil**

CS Dep. Geol. Geophys., Yale Univ., New Haven, CT, 06520, USA

SO Economic Geology and the Bulletin of the Society of Economic Geologists (1981), 76(1), 1-26  
CODEN: ECGLAL; ISSN: 0361-0128

DT Journal  
LA English

L2 ANSWER 37 OF 53 CAPLUS COPYRIGHT 2003 ACS

AB The roles of colony-stimulating factor (CSF) [62683-29-8] in long-term bone marrow cultures were studied and compared. After single addns. of high concns. of unpurified colony-stimulating activities to the cultures, rapid deterioration of the cultures was obsd. This appears to result from contaminants in the stimulatory prepns. Cultures to which one purified CSF from endotoxin mouse lung-conditioned medium was added did not run down 10 wk after addn. and were the same as the controls. The deterioration of the cultures to which unpurified stimulators were added could not be accounted for by accelerated granulopoiesis leading to subsequent exhaustion of the cultures. The inability of purified CSF to affect the cellularity of the suspension cells did not result from instability or masking of the activity in the cultures, nor did CSF preferentially stimulate the cells within the adherent layer. The suspension cells responded to purified CSF after sepn. from the adherent cells. The CSFs are marrow stimulators, their effects in turn may be stingently regulated within the marrow.

AN 1980:437924 CAPLUS  
DN 93:37924

TI The effect of mouse lung granulocyte-macrophage colony-stimulating factor and other colony-stimulating activities on the proliferation and differentiation of murine bone marrow cells in long-term cultures

AU Williams, Neil; Burgess, Antony W.  
CS Sloan-Kettering Inst. Cancer Res., Rye, NY, 10580, USA  
SO Journal of Cellular Physiology (1980), 102(3), 287-95  
CODEN: JCLLAX; ISSN: 0021-9541

DT Journal  
LA English

L2 ANSWER 38 OF 53 CAPLUS COPYRIGHT 2003 ACS

AB A polemic in answer to T. Finlow-Bates (*ibid.*, 1697-9) is given. As shown by Finlow-Bates, uncorrelated data can produce unimodal and pos. skewed frequency distribution of ratios. However, the lack of sulfidic S and org. C correlation in the data considered by Finlow-Bates reflects the presence of diagenetic (Py1) and later epigenetic (Py2) pyrite. Samples contg. only Py1 yield a sulfidic S vs. org. C correlation coeff. of 0.80.

AN 1980:9074 CAPLUS  
DN 92:9074

TI Studies of the base metal sulfide deposits at McArthur River, Northern Territory, Australia. II. The sulfide-sulfur and organic-carbon relationships of the concordant deposits and their significance. Reply to comments

AU Williams, Neil  
CS Res. Sch. Earth Sci., Aust. Natl. Univ., Canberra, 2600, Australia  
SO Economic Geology and the Bulletin of the Society of Economic Geologists (1979), 74(7), 1699-702  
CODEN: ECGLAL; ISSN: 0361-0128

DT Journal  
LA English

L2 ANSWER 39 OF 53 CAPLUS COPYRIGHT 2003 ACS

AB A polemic in answer to K. M. Scott and M. Lambert (*ibid.*, 1693-4) is given. SEM showed that the diagenetic pyrite (Py1) of the barren hanging wall is extensively overgrown by late-generation pyrites (Py2) in crystallog. continuity with Py1. The platykurtic frequency distribution of sulfidic S/org. C ratios in the hanging wall rock reflects the formation of these late overgrowths. The term epigenetic was used to refer to pre-lithification processes.

AN 1980:9072 CAPLUS  
DN 92:9072  
TI Studies of the base metal sulfide deposits at McArthur River, Northern Territory, Australia. II. The sulfide-sulfur and organic-carbon relationships of the concordant deposits and their significance. Reply to comments  
AU Williams, Neil  
CS Res. Sch. Earth Sci., Aust. Natl. Univ., Canberra, 2600, Australia  
SO Economic Geology and the Bulletin of the Society of Economic Geologists (1979), 74(7), 1695-7  
CODEN: ECGLAL; ISSN: 0361-0128  
DT Journal  
LA English

L2 ANSWER 40 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB Murine bone marrow progenitor cells that gave rise to macrophage colonies in semi-solid agar were more sensitive to PGE than were precursor cells of granulocytes and megakaryocytes. Macrophage colonies themselves had different sensitivities to the mol. Precursor cells of macrophages that formed colonies in the presence of a stimulating activity from L cells (L-cell CSA) were inhibited to 50% levels by 3 .times. 10-9M PGE. Macrophage progenitor cells, which require both L-cell colony-stimulating activity and rat hemolyzate for colony growth, were inhibited to the same level by 3 .times. 10-7M PGE. Other colony types (granulocytes and megakaryocytes) were sensitive to PGE only at concns. >10-6M. Accordingly, addn. of different PGE concns. to the culture assay should allow easy detection of precursor cells with morphol. distinct end cells. The different sensitivities to PGE of 2 macrophage colony types of different maturation stages indicate that PGE may provide feedback to control macrophage formation by inhibiting proliferation and differentiation of immature monocytoid cells.

AN 1979:400628 CAPLUS  
DN 91:628  
TI Preferential inhibition of murine macrophage colony formation by prostaglandin E  
AU Williams, Neil  
CS Walker Lab., Sloan-Kettering Inst. Cancer Res., Rye, NY, USA  
SO Blood (1979), 53(6), 1089-94  
CODEN: BLOOAW; ISSN: 0006-4971  
DT Journal  
LA English

L2 ANSWER 41 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB Effects of therapy with antineoplastic chems. on the growth of tumors and the induction of cytotoxic T-cells in the spleens of treated hosts were studied in mice bearing syngeneic tumors, J774 macrophage tumor, or EL-4 T-cell lymphoma. Progressively growing tumors suppressed the capacity for in vitro inducibility of spleen T-cells cytotoxic to allogeneic target cells. Doses of nitrogen mustard [55-86-7], mitomycin C [50-07-7], and polyinosinic-polycytidylic acid [24939-03-5], which decreased the growth of J774, counteracted the tumor-induced suppression of in vitro cytotoxic T-cell induction in spleen cells from BALB/c mice. Higher doses of nitrogen mustard and polyinosinic-polycytidylic acid inhibited the ability of spleen T-cells to become cytotoxic even in tumor-free mice. 1-.beta.-D-Arabinofuranosylcytosine [147-94-4] and nitrogen mustard decreased the growth of EL-4 ascites tumor and simultaneously restored the cytotoxic T-cell function of spleen cells in C57BL/6J mice. Polyinosinic-polycytidylic acid inhibited the growth of EL-4 only weakly and did not relieve the tumor-induced suppression of cytotoxic T-cell response. The highest levels of nitrogen mustard and polyinosinic-polycytidylic acid decreased cytotoxic T-cell activity in normal C57BL/6J mice. Thus, the inhibitory effects of several chemotherapeutic drugs on tumor growth correlate with restoration of cell-mediated immunol. reactivity.

AN 1979:66762 CAPLUS  
DN 90:66762  
TI Suppression and restoration of cytotoxic T-cell activity during chemotherapy of a mouse T-cell lymphoma and a macrophage tumor  
AU Tarnowski, George S.; Faanes, Ronald B.; Ralph, Peter; Williams, Neil  
CS Walker Lab., Mem. Sloan-Kettering Cancer Cent., Rye, NY, USA  
SO Cancer Research (1978), 38(12), 4540-5  
CODEN: CNREA8; ISSN: 0008-5472  
DT Journal  
LA English

L2 ANSWER 42 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB In analogy with diagenetic processes in modern anoxic sediments, formation of pyrite (Py) [1309-36-0] by early diagenetic microbial sulfate redn. in the McArthur deposits should have produced a strong pos. correlation between sulfide S and org. and frequency distributions of the sulfide S/org. C (S/C) ratio which are unimodal and sym. The S/C ratio frequency distributions at McArthur River are unimodal but asym. Well-mineralized samples, contg. galena [12179-39-4] and sphalerite [12169-28-7] as well as Py, have higher S/C ratios than poorly mineralized samples. Galena and sphalerite were deposited after 1st-generation Py by reactions involving org. C in the rocks and concurrent redn. of SO<sub>4</sub><sup>2-</sup> in soln.

AN 1978:618097 CAPLUS  
DN 89:218097  
TI Studies of the base metal sulfide deposits at McArthur River, Northern Territory, Australia: II. The sulfide-sulfur and organic-carbon relationships of the concordant deposits and their significance  
AU Williams, Neil  
CS Res. Sch. Earth Sci., Australian Natl. Univ., Canberra, Australia  
SO Economic Geology and the Bulletin of the Society of Economic Geologists (1978), 73(6), 1036-56  
CODEN: ECGLAL; ISSN: 0013-0109  
DT Journal  
LA English

L2 ANSWER 43 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB Discordant and concordant styles are described of mineralization in the 2 title deposits, which are located adjacent to the giant H.Y.C. (Here's Your Chance) stratiform Ag-Pb-Zn deposit. The discordant deposits formed epigenetically when metal- and sulfate-rich solns. migrating along faults, flowed into and reacted with dolostone breccias. The concordant mineralization, consisting of pyrite [1309-36-0], galena [12179-39-4], and sphalerite [12169-28-7] concd. in certain horizons of shale, also formed epigenetically, in part during diagenesis and later when the mineralizing solns. from which the discordant ores were deposited, flowed westward. As in the H.Y.C deposit the concordant mineralization probably formed by oxidn. of org. matter in shale concurrent with SO<sub>4</sub><sup>2-</sup> redn. in soln.

AN 1978:618096 CAPLUS  
DN 89:218096  
TI Studies of the base metal sulfide deposits at McArthur River, Northern Territory, Australia: I. The Cooley and Ridge deposits  
AU Williams, Neil  
CS Res. Sch. Earth Sci., Australian Natl. Univ., Canberra, Australia  
SO Economic Geology and the Bulletin of the Society of Economic Geologists (1978), 73(6), 1005-35  
CODEN: ECGLAL; ISSN: 0013-0109  
DT Journal  
LA English

L2 ANSWER 44 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB Normal bone marrow colony-forming units (CFU) from adult mice had sedimentation rates and d. distributions which did not correspond to

distributions of a single cell type, whereas, bone marrow CFU from mice recovering from radiation damage had a uniform d. and sedimentation rate distribution. The heterogeneity of normal marrow CFU can be attributed to the existence of 2 subpopulations: a slowly sedimentating population of quiescent cells, and a more rapidly sedimenting population of proliferating cells. The difference in sedimentation rates can be explained by a slight d. increase (from 1.070 to 1.075 g/cm<sup>3</sup>) at the transition from the resting into the cycling state. The noncycling CFU are considered to be a homogeneous population with a diam. of 7.0 .mu.m. The subpopulation of cycling CFU varies in diam. from 7.3 to 9.2 .mu.m depending on their phase in the cell cycle.

AN 1978:3895 CAPLUS  
DN 88:3895  
TI Physical separation of the cycling and noncycling compartments of murine hemopoietic stem cells  
AU Visser, Jan W. M.; Van den Engh, Ger; Williams, Neil; Mulder, Dries  
CS Radiobiol. Inst., Rijswijk, Neth.  
SO Exp. Hematol. Today, [Sel. Pap. Egon Lorenz Mem. Symp.] (1977), Meeting Date 1976, 21-7. Editor(s): Baum, Siegmund J.; Ledney, G. David. Publisher: Springer, New York, N. Y.  
CODEN: 36WLAO  
DT Conference  
LA English

L2 ANSWER 45 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB Unavailable  
AN 1977:174412 CAPLUS  
DN 86:174412  
TI The formation of sedimentary-type stratiform sulfide deposits  
AU Williams, Neil  
CS Yale Univ., New Haven, CT, USA  
SO (1976) 353 pp. Avail.: Xerox Univ. Microfilms, Ann Arbor, Mich., Order No. 76-29,708  
From: Diss. Abstr. Int. B 1977, 37(7), 3306-7  
DT Dissertation  
LA English

L2 ANSWER 46 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB Isothermal, 1000.degree., ternary phase-diagrams involving Pt and Pd, applicable to primary magmatic phases, are presented as portions of 2 larger quaternary system, Pt-Pd-As-S and Pt-Pd-Fe-S. The system Pt-Pd-Fe-S was studied because many platinoid minerals contain small amts. of Fe or are assocd. with pyrrhotite and are believed to have ptd. from an immiscible sulfide melt. The mos striking features obsd. are the large liq. fields, suggesting that crystal-liq. fractionations might occur in immiscible sulfide melts, providing a mechanism for the concn. of the rare elements Sn, Se, Te, Au, Sb, and Bi together with more common elements such as Cu and Ni, which would be preferentially fractionated into an immiscible sulfide melt when it seps. from its siliceous magma host. The immiscible sulfide-melt would always be Fe-rich and the 1st phase to cryst. on cooling would be pyrrhotite [1310-50-5].  
AN 1977:93260 CAPLUS  
DN 86:93260  
TI Phase relations in ternary portions of the system platinum-palladium-iron-arsenic-sulfur  
AU Skinner, Brian J.; Luce, Frederick D.; Dill, Julia A.; Ellis, David E.; Hagan, Harry A.; Lewis, Dale M.; Odell, Deborah A.; Sverjensky, Dimitri A.; Williams, Neil  
CS Dep. Geol. Geophys., Yale Univ., New Haven, CT, USA  
SO Economic Geology and the Bulletin of the Society of Economic Geologists (1976), 71(7), 1469-75  
CODEN: ECGLAL; ISSN: 0361-0128  
DT Journal

LA English

L2 ANSWER 47 OF 53 CAPLUS COPYRIGHT 2003 ACS

AB A mineralization model for the enigmatic stratiform sulfide deposit at McArthur River, Northern Territory, Australia was discussed. The S isotope ratio data of J. W. Smith and N. J. W. Croxford (1973) was examd. and their dual S synsedimentary model was revised. A single S source model was proposed in which dissoln. of preexisting pyrite by a circulating metal-rich, but S-poor, brine is followed by deposition of base-metal sulfides. The model was supported by the systematic relation between the S isotopic compn. of galena, pyrite, and sphalerite in the McArthur orebody and their stratigraphic positions.

AN 1974:147695 CAPLUS

DN 80:147695

TI Alternative interpretation of sulfur isotope ratios in the McArthur lead-zinc-silver deposit

AU Williams, Neil; Rye, Danny M.

CS Dep. Geol. Geophys., Yale Univ., New Haven, CT, USA

SO Nature (London, United Kingdom) (1974), 247(5442), 535-7  
CODEN: NATUAS; ISSN: 0028-0836

DT Journal

LA English

L2 ANSWER 48 OF 53 CAPLUS COPYRIGHT 2003 ACS

AB Unavailable

AN 1946:7467 CAPLUS

DN 40:7467

OREF 40:1303e

TI Selective acidization procedures at Carthage Field result in greater productivity-larger ultimate recovery

AU Williams, Neil

SO Oil Gas J. (1945), 44(No. 33), 56-8, 66-8

DT Journal

LA Unavailable

L2 ANSWER 49 OF 53 CAPLUS COPYRIGHT 2003 ACS

AB Experience has shown that all corrosion of iron ceases when the neg. potential built up is below -0.2853 v. For pipe lines to which the elec. energy is supplied by wind chargers, a dual installation consisting of a direct connection to the line of a 32-v. charger and a 12-v. unit maintaining a 225 amp. hr. storage battery for use when the wind failed proved very effective. The transfer from direct to battery supply was automatic.

AN 1941:20171 CAPLUS

DN 35:20171

OREF 35:3215b-c

TI Constancy of application is important factor in cathodic protection

AU Williams, Neil

SO Oil Gas J. (1940), 39(No. 30), 53-4

DT Journal

LA Unavailable

L2 ANSWER 50 OF 53 CAPLUS COPYRIGHT 2003 ACS

AB The Magnolia Petroleum Co. uses elec. dehydrators operating on emulsion which has been heated to 175-90.degree.F. It has been found that heat in conjunction with the dehydrators gives much improved results.

AN 1936:64511 CAPLUS

DN 30:64511

OREF 30:8585d

TI New treating and dehydrating plant solves oil company's emulsion problems

AU Williams, Neil

SO Oil Gas J. (1936), 35(No. 16), 29

DT Journal

LA Unavailable

L2 ANSWER 51 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB Description of a modern True-Vapor-Phase cracking unit.  
AN 1936:9237 CAPLUS  
DN 30:9237  
OREF 30:1216b-c  
TI New True-Vapor-Phase control unit uses tubular heater instead of original "stoves"  
AU **Williams, Neil**  
SO Oil and Gas J. (1935), 34(No. 25), 38-9  
DT Journal  
LA Unavailable

L2 ANSWER 52 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB The benzene value of the finished products can be detd. by control of the middle point in distn.  
AN 1934:57308 CAPLUS  
DN 28:57308  
OREF 28:6990h-i  
TI Octane value of cracked gasoline improved by controlling the 50 percent distillation point  
AU **Williams, Neil**  
SO Oil and Gas J. (1934), 33(No. 9), 11  
DT Journal  
LA Unavailable

L2 ANSWER 53 OF 53 CAPLUS COPYRIGHT 2003 ACS  
AB Unavailable  
AN 1935:4715 CAPLUS  
DN 29:4715  
OREF 29:586i  
TI Gulf Coast operators giving more thought to conditioning mud  
AU **Williams, Neil**  
SO Oil and Gas J. (1934), 33(No. 26), 10,33  
DT Journal  
LA Unavailable

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